Abstract

Development of the construction of special machines for horizontal surfaces and investigation of their connections // Thesis Masters. Protsyk Taras Mikhailovich. Ternopil Ivan Pul'uj National Technical University, Faculty of Engineering and Food Technology, Department of designing machines tools and machines, group HVm-51.: TNTU, 2015.

Supervisor: Ph.D., Associate Professor Sklyarov R.

Master's thesis consists of introduction, 10 chapters and key findings placed on pages 212, 113 figures and 21 tables on 63 pages, list of references with names 54 on 5 pages and 3 applications on 16 pages. Only 228 pages.

The aim is to assess the state of development of methods and means of the processing of polygonal surfaces and the development of new designs machines for their production.

The object of study - profile connections kinematic pair.

Subject of investigation - the stress-strain state of conjugate elements of the profile connection.

The method of research - finite element method, theory of systems.

In this thesis master the basic relevant circuit forming surfaces analyzed area of use. The technological process of manufacturing parts representative of "shaft profile."

Done constructing basic executive units machine. The analysis of stress-strain state in the 3 and 4 core connected. Solved the question of the feasibility adopted technical solutions. Also disclosed issues of safety and environmental safety of human life.

Keywords: machine, polygonal surfaces, stress-strain state.